

## REMARKS

Claims 1-4, 6, 8-19, 22, 25, 26, 28-30, 33, and 34 were pending in the above-identified application when last examined. Claims 1-4, 6, 8-19, 22, 25, 26, 28-30, 33, and 34 stand rejected and the rejection was made final in the Final Office Action dated June 24, 2009. Applicant filed a Notice of Appeal on September 24, 2009, but on further consideration has decided to respond to the Final Office Action and request continued examination under 37 C.F.R. § 1.114. A Request for Continued Examination accompanies this submission. Accordingly, the appeal of this application is withdrawn, and Applicant requests entry of the above amendment, which cancels claim 12, amends claims 1, 6, 8-10, 13, 15, 17, 19, and 34, and adds claim 35.

Applicant believes that this response is being timely filed since the submission is within two months of the Notice of Appeal, and therefore no extension of time is required. However, if an extension of time is required for acceptance of this submission or to maintain the application, Applicant hereby requests any such extension and authorizes the Commissioner to charge Deposit Account 08-2025 for any fees that may be required for such extension of the time for response to the Final Office Action.

As noted in the Final Office Action, claim 7 was deleted in Applicant's amendment submitted September 12, 2008. Applicant's subsequent amendment submitted March 23, 2009 incorrectly listed claim 7 as pending. The claims as listed above show claim 7 as having been canceled, correcting the previous error.

Claims 15-18, 33, and 34 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. In response, independent claims 15 and 34 are being amended.

Independent claim 15 is a method claim, and now recites statutory subject matter at least by reciting, "generating in a processing system a representation of the RDF graph and ordering the representation, ... and reordering the representation using the labels and the modifications to produce in the processing system a canonical representation of the RDF graph." Accordingly, the method of claim 15 is tied to "a processing system" or an apparatus, which is one of the statutory categories of patentable subject matter. Further, the recited tie of

the method claim to an apparatus is in the steps of the claims, rather than the preamble. Accordingly, claim 15 recites statutory subject matter.

Claims 16-18 and 33 depend from claim 15 and therefore inherit the statutory subject matter of claim 15.

Independent claim 34 is a method claim that is tied to an apparatus at least by reciting, “generating in the processing system a representation of the RDF graph.” Accordingly, claim 34 recites statutory subject matter.

For the above reasons, Applicant requests reconsideration and withdrawal of the rejection under 35 U.S.C. § 101.

Claims 1-4, 6, 8-14, 19, 25, 26, 28-30, 33, and 34 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Pat. App. Pub. No. 2003/0050927 (Hussam) in view of U.S. Pat. No. 6,774,899 (Ryall) and further in view of U.S. Pat. No. 6,889,226 (O’Neil). Claim 12 is canceled. Applicant respectfully traverses the rejection of claims 1-4, 6, 8-11, 13, 14, 19, 25, 26, 28-30, 33, and 34.

Independent claim 1 distinguishes over Hussam, Ryall, and O’Neil at least by reciting, “assigning different respective labels to blank nodes that can be distinguished based on a limited examination of the RDF graph around each of the blank nodes, ...; applying a second set of rules that operates to modify blank nodes that are not distinguished by the limited examination of the RDF graph; and... reordering the representation to produce a canonical representation based on the RDF graph.” The combination of Hussam, Ryall, and O’Neil fail to suggest canonicalizing an RDF (Resource Description Framework) graph and further fails to suggest using a limited examination for labeling some blank nodes and modifying other blank nodes when producing a canonical representation.

The Final Office Action on page 4, lines 4-10 states, “Hussam has been relied upon to describe that RDF graphs including blank nodes were well known ... Hussam doesn’t disclose generating a canonicalized form of the RDF graph ... but Ryall describes ... generating canonicalized forms of graphs using visual organization features (VOFs) (see 3:14-4:21).” Ryall is directed to drawing graphs, and col. 3, line 14, to col. 4, line 21 of Ryall describes the operation of a user interface to control the appearance of a graph. Ryall nowhere mentions canonicalizing of graphs or representations of graphs. Applicant’s specification in paragraph [0024] describes, “By canonicalizing the RDF there is at most one representation of the RDF graph. It therefore becomes possible to check that any two RDF files are the same by

converting both into canonical RDF and doing a character-by-character comparison.” Ryall simply improves the visual appearance of graphs, for example, by lining up elements and providing even spacing. For example, Fig. 3G, which is referred to in the portion of Ryall cited in the rejection, illustrates how symmetry can improve the appearance of a graph on the right side of the figure relative to the left side of the figure, but Ryall fails to indicate that any graph is canonical. For example, Ryall fails to indicate that the same data represented in a graph of Fig. 3G if turned upside down or on its side would be converted to the same standard or canonical form. Clearly, visual attributes such as alignment, even spacing, and symmetry do not suggest producing a canonical representation.

The Final Office Action further states at page 4, lines 16 to page 5, line 4 that “Hussam in view of Ryall doesn’t disclose assigning a different respective label … by a limited examination around each node … However, O’Neil discloses a system and method that assigns a different respective label … by a limited examination … 1:38-65, 6:9-27, 6:48-7:55)” O’Neil is primarily directed to reorganizing hierarchical data from a tree structure. Col. 1, lines 38-65 of O’Neil describe position identifiers for a tree structure, which fails to suggest a limited examination around a node. Col. 6, lines 9-27 of O’Neil describe logical connections in a network, which fails to suggest a limited examination around a node. Col. 6, lines 48 to col. 7, line 55 of O’Neil describe a hierarchy in XML data, which again fails to suggest a limited examination around a node. O’Neil fails to suggest naming based on a limited examination. Accordingly, the collective description of Hussam, Ryall, and O’Neil fails to suggest limiting examination around a node when canonicalizing an RDF graph.

Claims 2-4, 6, 8-14, and 28-30 depend from claim 1 and are patentable over Hussam, Ryall, and O’Neil for at least the same reasons that claim 1 is patentable over Hussam, Ryall, and O’Neil.

Independent claim 19 patentably distinguishes over Hussam, Ryall, and O’Neil by reciting, “assigning different respective labels to blank nodes that can be distinguished based on a limited examination of the RDF graph around each of the blank nodes …; applying a second set of rules that operates to modify blank nodes that are not distinguishable by the limited examination of the RDF graph; and applying a third set of rules that include reordering the representation, the reordered representation comprising a canonical representation based on the RDF graph.” As noted above, the combination of Hussam, Ryall, and O’Neil fail to suggest either creating a canonical representation or using a limited

examination in labeling nodes. Accordingly, claim 19 is patentable over Hussam, Ryall, and O’Neil.

Independent claim 25 distinguishes over Hussam, Ryall, and O’Neil at least by reciting, “assigning a different respective label to each of those blank nodes that are determined, by a limited examination around each node.” As noted above, Hussam, Ryall, and O’Neil fail to mention or suggest assigning labels determined by a limited examination around blank nodes. Accordingly, claim 25 is patentable over Hussam, Ryall, and O’Neil.

Claim 26 depends from claim 25 and is patentable over Hussam, Ryall, and O’Neil for at least the same reasons that claim 25 is patentable over Hussam, Ryall, and O’Neil.

Claim 33 depends from claim 15. Claim 15 is patentable over Hussam and Ryall for reasons given below in response to the rejection of independent claim 15. Applicant submits that reasons given below for patentability of claim 15 over Hussam and Ryall also apply to the combination of Hussam, Ryall, and O’Neil. Accordingly, claims 15 and 33 are patentable over Hussam, Ryall, and O’Neil.

Independent claim 34 distinguishes over Hussam, Ryall, and O’Neil at least by reciting, “assigning different respective labels to blank nodes of the RDF graph that are determined, by a limited examination around each node, to be distinguishable from the other blank nodes by their respective connected features of the RDF graph.” As noted above, Hussam, Ryall, and O’Neil collectively fail to mention or suggest assigning labels based on a limited examination around blank nodes. Accordingly, claim 34 is patentable over Hussam, Ryall, and O’Neil.

For the above reasons, Applicant requests reconsideration and withdrawal of this rejection under 35 U.S.C. § 103.

Claims 15-18 and 22 were rejected under 35 U.S.C. § 103(a) as unpatentable over Hussam in view of Ryall. Applicant respectfully traverses the rejection.

Independent claim 15 distinguishes over the combination of Hussam and Ryall at least by reciting, “assigning a different respective label to each of a number of the plurality of blank nodes; modifying the blank nodes that remain unlabelled; and reordering the representation using the labels and the modifications to produce … a canonical representation of the RDF graph.” The combination of Hussam and Ryall as noted above fail to suggest producing “a canonical representation.”

Hussam describes RDF graphs but fails to disclose or suggest canonicalizing an RDF graph. Ryall describes manipulating the appearance of graphs but fails to mention or suggest creating a canonical representation of a graph. Accordingly, combining Hussam and Ryall fails to suggest canonical representations, and claim 15 is patentable over the combination of Hussam and Ryall.

Claims 16-18 depend from claim 15 and are patentable over Hussam and Ryall for at least the same reasons that claim 15 is patentable over Hussam and Ryall.

Independent claim 22 distinguishes over Hussam and Ryall at least by reciting, canonicalizing “an RDF graph having a plurality of blank nodes by: … assigning a different respective label to each of a number of the plurality of blank nodes; modifying the portion of the blank nodes remaining unlabelled; and reordering the representation.” As noted above, Hussam and Ryall fail to suggest canonicalizing an RDF graph. Hussam and Ryall further fail to suggest treating some blank nodes differently from others. Accordingly, claim 22 is patentable over the combination of Hussam and Ryall.

For the above reasons, Applicant requests reconsideration and withdrawal of the rejection under 35 U.S.C. § 103.

New claim 35 depends from claim 34 and is patentable for at least the same reasons that claim 34 is patentable.

For the above reasons, Applicant respectfully requests that examination of the above-identified patent application be reopened and requests allowance of the application including claims 1-4, 6, 8-11, 13-19, 22, 25, 26, 28-30, and 33-35.

Respectfully submitted,

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